

# Missouri Department of Natural Resources



## PUBLIC NOTICE

### DRAFT MISSOURI STATE OPERATING PERMIT

DATE: October 22, 2004

In accordance with the state Clean Water Law, Chapter 644, RSMo, Clean Water Commission regulation 10 CSR 20-6.010, and the federal Clean Water Act, the applicants listed herein have applied for authorization to either discharge to waters of the state or to operate a no-discharge wastewater treatment facility. The proposed permits for these operations are consistent with applicable water quality standards, effluent standards and/or treatment requirements or suitable timetables to meet these requirements (see 10 CSR 20-7.015 and 7.031). All permits will be issued for a period of five years, unless noted otherwise in the Public Notice for that discharge.

On the basis of preliminary staff review and the application of applicable standards and regulations, the Missouri Department of Natural Resources (MDNR), as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions. The proposed determinations are tentative pending public comment.

Persons wishing to comment on the proposed permit conditions are invited to submit them in writing to the Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, Missouri 65102, ATTN: Peter Goode, Professional Engineer. Please include the permit number in all comment letters.

Comments should be confined to the issues relating to the proposed action and permit(s) and the effect on water quality. The MDNR may not consider as relevant comments or objections to a permit based on issues outside the authority of the Clean Water Commission, (see Curdt v. Mo. Clean Water Commission, 586 S.W.2d 58 Mo. App. 1979).

All comments must be postmarked by November 22, 2004 or received in our office by 5:00 p.m. on November 25, 2004. The requirement of a signed document makes it impossible to accept email comments for consideration at this time. Comments will be considered in the formulation of all final determinations regarding the applications. If response to this notice indicates significant public interest, a public meeting or hearing may be held after due notice for the purpose of receiving public comment on the proposed permit or determination. Public hearings and/or issuance of the permit will be conducted or processed according to 10 CSR 20-6.020.

Copies of all draft permits and other information including copies of applicable regulations are available for inspection and copying at DNR's website, <http://www.dnr.mo.gov/wpscd/wpcp/homewpcp.htm>, or at the Department of Natural Resources, Water Protection Program, 205 Jefferson Street, P.O. Box 176, Jefferson City, Missouri 65102, between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday.

Public Notice Date: October 22, 2004

Permit Number: MO-0047031

Southeast Regional Office

<b>FACILITY NAME AND ADDRESS</b>	<b>NAME AND ADDRESS OF OWNER</b>
Rolla, Vichy Road WWTP 11751 County Road 8030 Rolla, MO 65401	City of Rolla P.O. Box 979 Rolla, MO 65402
<b>RECEIVING STREAM &amp; LEGAL DESCRIPTION</b>	<b>TYPE OF DISCHARGE</b>
Tributary of Spring Creek (Lower Osage River Basin), Sec. 35, T38N, R8W, Phelps County	Domestic, reissue

STATE OF MISSOURI  
**DEPARTMENT OF NATURAL RESOURCES**  
MISSOURI CLEAN WATER COMMISSION



## MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92<sup>nd</sup> Congress) as amended,

Permit No. MO-0047031

Owner: City of Rolla  
Address: P.O. Box 979, Rolla, MO 65402

Continuing Authority: Same as above  
Address: Same as above

Facility Name: Rolla, Vichy Road WWTP  
Address: 11751 County Road 8030, Rolla, MO 65402

Legal Description: NW ¼, NE ¼, Sec. 35, T2N, R8E, P1S, Phelps County, MO

Receiving Stream: Unnamed Tributary of Spring Creek  
First Classified Stream and ID: Spring Creek (P1S) (60)  
USGS Basin & Sub-watershed No.: 03-00-000

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

### FACILITY DESCRIPTION

#### Outfall #001 – POTW- SIC #4952

Contact Stabilization/aerobic digester/trickling filter/  
sludge storage basin/sludge is land applied.  
Design population equivalent is 4,000.  
Design flow is 400,000 gallons per day.  
Actual flow is 300,000 gallons per day.  
Design sludge production is 100 dry tons/year.  
Actual sludge production is 18.1 dry tons/year.

#### Outfall #002 – POTW – SIC #4952

Infiltration and Inflow Clarifier.  
Design flow is 3 million gallons per day.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

Effective Date

Stephen M. Mahfood, Director, Department of Natural Resources  
Executive Secretary, Clean Water Commission

Expiration Date  
MO 780-0041 (10-93)

Jim Hull, Director of Staff, Clean Water Commission

					PAGE NUMBER 2 of 4	
<b>A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS</b>					PERMIT NUMBER MO-0047031	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u>						
Flow	MGD	*		*	once/week	24 hr. total
Biochemical Oxygen Demand <sub>5</sub> **	mg/L		45	30	once/month	24 hr. composite
Total Suspended Solids**	mg/L		45	30	once/month	24 hr. composite
pH – Units	SU	***		***	once/ month	grab
Ammonia as N	mg/L	5		5	once/month	grab
Temperature					once/month	grab
Dissolved Oxygen	mg/L			*	once/month	grab
<u>Outfall #002</u>						
Flow	MGD	*		*	****	24 hr. total
Biochemical Oxygen Demand <sub>5</sub>	mg/L		45	45	****	24 hr. composite
Total Suspended Solids	mg/L		45	45	****	24 hr. composite
Ammonia as N	mg/L	*		*	****	grab
pH	SU	***		***	****	grab
Temperature	°F	*		*	****	grab
Dissolved Oxygen	mg/L	*		*	****	grab
<u>Instream Monitoring</u> (Note 1)						
Ammonia as N	mg/L	*		*	once/month	grab
pH	SU	*		*	once/month	grab
Temperature	°F	*		*	once/month	grab
Dissolved Oxygen	mg/L	*		*	once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE _____. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
<b>B. STANDARD CONDITIONS</b>						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I, II, &amp; III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- \* Monitoring requirement only.
- \*\* This facility is required to meet a removal efficiency of 85% or more.
- \*\*\* pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
- \*\*\*\* Monitoring shall occur once per discharge event. The sampling location shall be following the effluent weir and prior to mixing with the effluent from outfall #001.

Note 1 – Instream monitoring will be conducted approximately ¼ mile downstream of the plant outfall.

C. SPECIAL CONDITIONS

1. This permit may be reopened and modified, or alternatively, be revoked and reissued, under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
    - (1) contains different conditions which are less stringent than any effluent limitation in the permit; or
    - (2) controls any pollutant in a different manner than any effluent limitation in the permit.
  - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates that such changes are necessary to assure compliance with Missouri's Water Quality Standards.
  - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.
- The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.
2. All outfalls must be clearly marked in the field.
  3. Permittee will cease discharge by connection to areawide wastewater treatment system within 90 days of notice of its availability.
  4. **Changes in Discharges of Toxic Substances**  
The permittee shall notify the Director as soon as it knows or has reason to believe:
    - (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
      - (1) One hundred micrograms per liter (100 µg/L);
      - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
      - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
      - (4) The level established in Part A of the permit by the Director.
    - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
  5. Report as no-discharge when a discharge does not occur during the report period.
  6. **Water Quality Standards**
    - (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
    - (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:

C. SPECIAL CONDITIONS (continued)

6. Water Quality Standards (continued)

- (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
- (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
- (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
- (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
- (5) There shall be no significant human health hazard from incidental contact with the water;
- (6) There shall be no acute toxicity to livestock or wildlife watering;
- (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
- (8) Waters shall be free from used tires, car bodies, appliances, debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200.2

7. Sludge and Biosolids Use For Domestic Wastewater Treatment

- (a) Permittee shall comply with the pollutant limits, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions, Part III.
- (b) If sludge is not removed by a conventional treatment process, permittee shall be authorized to land apply biosolids. Permit Standard Conditions, Part III, shall apply to land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of sludge. The department may require submittal of a biosolids management plan for department review and approval, which shall be determined appropriate on a case-by-case basis.

Date of Fact Sheet: October 14, 2004

Date of Public Notice: October 22, 2004

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT  
FACT SHEET

This Fact Sheet explains the applicable regulations, rationale for development of this permit and the public participation process.

NPDES PERMIT NUMBER: MO-0047031

FACILITY NAME: Rolla, Vichy Road WWTP

OWNER NAME: City of Rolla

LOCATION: Sec. 35 T38N R8W County: Phelps

RECEIVING STREAM: Unnamed Tributary of Spring Creek

FACILITY CONTACT PERSON: Barney Smith TELEPHONE: (573) 364-6122

FACILITY DESCRIPTION AND RATIONALE

The City of Rolla has applied for reissuance of the National Pollutant Discharge Elimination System permit and Missouri State Operating Permit for the above wastewater treatment plant. The facility consists of two outfalls; 1) a 400,000 gallon per day contact stabilization plant with a trickling filter and polishing tank and 2) an emergency holding basin/clarifier with a 3 million gallon per day capacity.

Effluent limitations are established as per the attached Water Quality Review Sheet.

This permit will be issued for a period of five years.

**WATER QUALITY REVIEW SHEET**  
Determination of Effluent Limits

**FACILITY INFORMATION**

Facility Name: Rolla, Vichy Rd. WWTP NPDES #: MO-0047031

Facility Type/Description: Contact Stabilization (Secondary)

8-Digit Huc: 10290203 County: Phelps

Legal Description: NW ¼, NE ¼, Sec 35, T38N, R8W

Latitude/Longitude: 3758365/-09146239

Water Quality History And Special Problems: Plant was upgraded in 1998.

\_\_\_\_\_

\_\_\_\_\_

**OUTFALL CHARACTERISTICS**

Outfall	Design Flow (Cfs)	Treatment Type	Receiving Waterbody	Main Contaminant Of Concern
001	0.62	secondary	Trib of Spring Creek	
002	4.6	I/I clarifier	same	

**RECEIVING WATERBODY INFORMATION**

Waterbody	Class	7q10 (Cfs)	*Designated Uses	Other Characteristics
Trib of Spring Creek	U	0	none	
Spring Creek	P	0.1	aql, lwv	

\*Cool water fishery (clf), cold water fishery (cdf), irrigation (irr), industrial (ind), boating & canoeing (btg), drinking water supply (dws), whole body contact recreation (wbc), protection of warmwater aquatic life and human health (aql), livestock & wildlife watering (lwv)

**PERMIT LIMITS AND INFORMATION**

TMDL Watershed: Yes ☐ No ☒ Disinfection Waiver: Yes ☐ No ☐ NA ☐

W.L.A. Study Conducted: Yes ☐ No ☐ 303d Waterbody: Yes ☐ No ☒ NA ☐

Disinfection Required: Yes ☐ No ☒ Violations: Yes ☐ No ☒



**Outfall# 001**Wet Test: Yes ☐ No ☒ Frequency: \_\_\_\_\_ A.E.C. \_\_\_\_\_ Limit: \_\_\_\_\_

PARAMETER	Daily Maximum	Weekly Average	Monthly Average
Flow	*		*
BOD		45 mg/L	30 mg/L
TSS		45 mg/L	30mg/L
Ammonia as N	5 mg/L		5 mg/L
pH	6 - 9		
Temperature	*		*
Dissolved Oxygen	*		*

\* monitoring only

**Outfall# 002**Wet Test: Yes ☐ No ☒ Frequency: \_\_\_\_\_ A.E.C. \_\_\_\_\_ Limit: \_\_\_\_\_

PARAMETER	Daily Maximum	Weekly Average	Monthly Average
Flow	*		*
BOD		45 mg/L	45 mg/L
TSS		45 mg/L	45 mg/L
Ammonia as N	*		*
pH	6 - 9		
Temperature	*		*
Dissolved Oxygen	*		*

\* monitoring only

**RECEIVING WATER MONITORING REQUIREMENTS****Site (Downstream)**

Parameter(S)	Sampling Frequency	Sample Type	Location
Temperature	once/month	grab	¼ mile downstream of outfall
pH	once/month	grab	same
Ammonia as N	once/month	grab	same
Dissolved Oxygen	once/month	grab	same

**Site (Name)**

Parameter(S)	Sampling Frequency	Sample Type	Location

**Derivation and Discussion of Limits**

EFFLUENT LIMITATIONS ARE AS PER THE CURRENT PERMIT.

Reviewer: Jerry Croy

Date: October 13, 2004

Unit Chief: Richard J. Laux

Monitoring and effluent limits contained within this document have been developed in accordance with EPA guidelines using the best available data and are believed to be consistent with Missouri's Water Quality Standards and Effluent Regulations. If additional water quality data or anecdotal information are available that may affect the recommended monitoring and effluent limits, please forward these data and information to the author.